Graphics Blaster RIVA TNT2 Value Installation Guide

Contents

Introduction

The Graphics Blaster™ RIVA TNT2™ Value is a high quality 2D/3D/video graphics accelerator card that is well suited for a wide variety of applications ranging from everyday desktop use to gaming and entertainment.

Leveraging NVIDIA™'s RIVA TNT2 graphics controller, the Graphics Blaster RIVA TNT2 Value delivers high quality and performance. Its dual texture architecture can process 2 pixels or textures per clock cycle; this enables developers to create special effects such as multi-layered textures, bump mapping to simulate rough surfaces, and environmental mapping that gives objects reflective properties. Developers can take advantage of advanced filtering modes (including trilinear mipmapping and anisotropic filtering) with full scene anti-aliasing to create realistic images that rival more expensive graphics workstations.

The Graphics Blaster RIVA TNT2 Value provides outstanding 2D and video acceleration as well and also supports software DVD decoders through hardware color and pixel format conversion.

Serial and Model Numbers

Your card's serial and model numbers can be found at the back of the card. We recommend that you record the serial and model number below. This information will be useful in the event that you need to contact our Technical Support staff for troubleshooting or your dealer for warranty service.

Table 1:   Serial numbers and model numbers.

Hardware	Product Codes	Numbers
Graphics Blaster RIVA TNT2 Value	Serial Number	
	Model Number	

Before You Begin

The README file on the CD-ROM contains information not available at the time of printing. Read the file before you continue. In addition, read the following:

❑ Minimum System Requirements
❑ Updating Drivers

Minimum System Requirements

❑ IBM® PC 100% compatible
❑ Genuine Intel Pentium II, Pentium III, AMD-K6 or AMD-K6-2 processor running at 90 MHz or higher
❑ 32 MB RAM
❑ 15 MB free hard disk space
❑ Vacant 32-bit AGP 1.0 expansion slot for Graphics Blaster RIVA TNT2 Value
❑ VGA monitor

❑ CD-ROM drive installed

❑ Windows 95, Windows 98, Windows NT 4.0 (with Service Pack 3),
   or Windows 2000 (when available)

Updating Drivers

To download the latest drivers for Graphics Blaster RIVA TNT2 Value, visit Creative's Web site (refer to the *Technical Support* leaflet for details).

Preliminary step for Windows 95 users

Since Windows automatically detects new hardware and starts the software installation procedure upon startup, you should verify your Windows version number before installing the graphics card.

To verify your Windows 95 version number

1. Click **Start** -> **Settings** -> **Control Panel**.

2. In the **Control Panel** window, double-click the **System** icon.
   Your Windows 95 version number is displayed in the **General** tabbed page of the **Systems Properties** dialog box.

3. Note the version number.
   The following are the possible Windows 95 version numbers:

   ❑ 4.00.950 (Retail version)

   ❑ 4.00.950A (Retail version)

   ❑ 4.00.950B (OSR version 2 and 2.1)

   ❑ 4.00.950C (OSR version 2.5)

Check the appropriate box so that you can refer to the Windows' version number quickly during the software installation process.

Installing Your Graphics Card

Figure 1 shows you the connectors on the Graphics Blaster RIVA TNT2 Value card.
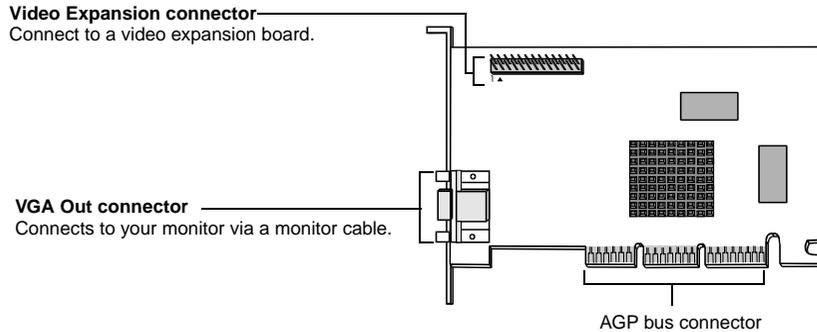
Video Expansion connector
Connect to a video expansion board.

VGA Out connector
Connects to your monitor via a monitor cable.

AGP bus connector

Figure 1:   The Graphics Blaster RIVA TNT2 Value card.

To install the graphics card

If you are replacing an existing VGA card with Graphics Blaster RIVA TNT2 Value, please remember to remove the existing VGA card.

1. Switch off your computer and all peripheral devices.
2. Disconnect the power cord from the wall outlet.
3. Touch any metallic surface on your computer to discharge any static electricity.
4. Remove the computer cover.
5. Locate a free AGP expansion slot.
   Figure 2 shows the various types of expansion slots.
6. Remove the metal plate from the AGP slot.
   Keep the screw and metal plate for future use.
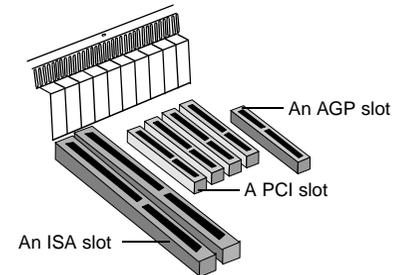7. Align the bus connector of the graphics card with the expansion slot.

An AGP slot

A PCI slot

An ISA slot

Figure 2:   Types of expansion slots.

8. Press the card's bus connector gently and evenly into the slot, making sure that the bus connector comes into full contact with the slot. Then, secure the card to the computer casing with a screw. See Figure 3 below.
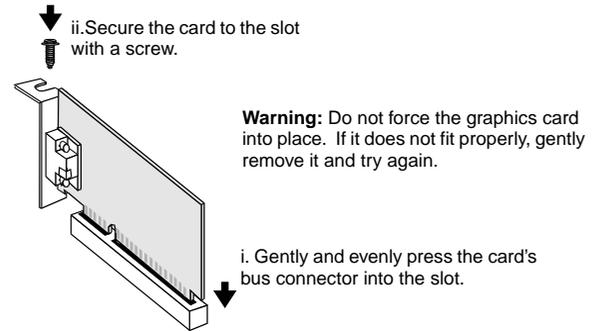

ii.Secure the card to the slot with a screw.

Warning: Do not force the graphics card into place. If it does not fit properly, gently remove it and try again.

i. Gently and evenly press the card's bus connector into the slot.

Figure 3:   Securing the graphics card to the slot.

9. Connect the monitor cable to the VGA Out connector of Graphics Blaster RIVA TNT2 Value, as shown in Figure 4.

VGA Monitor cable

VGA monitor

VGA Out connector

Graphics Blaster RIVA TNT2 Value

Figure 4:   Connecting your VGA monitor to Graphics Blaster RIVA TNT2 Value.

10. Replace the computer cover and plug the power cord back into the wall outlet.

If you are using a multi-frequency monitor, you may need a special 15-pin PS/2-compatible adapter cable. If your multi-frequency monitor allows you to switch between 'TTL' and 'analog' operation modes, set the switch to 'analog'. For details, refer to your monitor's manual.
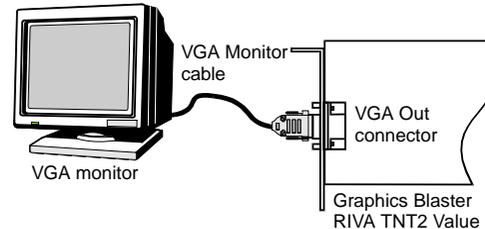
Installing Software

After installing the graphics card, you can install the software. The Graphics Blaster RIVA TNT2 Value CD contains the following:

❑ Drivers for Windows 95/98 (common to both)
❑ Drivers for Windows NT 4.0
❑ Creative Enhanced BlasterControl™ for Windows 95/98 and Windows NT 4.0
❑ Creative SoftMPEG for Windows 95/98
❑ Sonnetech Colorific®/3Deep™ for Windows 95/98 and Windows NT 4.0

This section is organized as follows:

❑ To install in Windows 95 (Retail version)
❑ To install in Windows 95 (OSR version 2.0 and later)
❑ To install in Windows 98
❑ To install in Windows NT 4.0 (Service Pack 3)

To install in Windows 95 (Retail version)

1. Switch on your system.
   Windows 95 automatically detects the graphics card.
   A **New Hardware Found** message box appears, informing you that a display adapter has been detected.
2. When a dialog box similar to Figure 5 appears, ensure that the **Driver from disk provided by hardware manufacturer** option is selected.
3. Click the **OK** button.
4. Insert the Graphics Blaster RIVA TNT2 Value CD into your CD-ROM drive.

*Figure 5: Selecting the **Driver from disk provided by hardware manufacturer** option.*

5. In the **Install From Disk** dialog box, type **D:\WINDOWS** (where D: represents your CD-ROM drive) and click the **OK** button.

6. If prompted to select drivers, click the **Graphics Blaster RIVA TNT2 Value** drivers. The drivers are copied to your system.

7. When prompted to restart your system, click the **Yes** button.

8. After the system has restarted, proceed to install the applications. Click **Start** -> **Run**.

9. In the **Run** dialog box, type **D:\WINDOWS\SETUP** and click the **OK** button.

10. Follow the instructions on the screen to complete the setup.
   If you do not install all the applications now, you can install them later.

To install in Windows 95 (OSR version 2.0 and later)

1. Switch on your system.
   Windows 95 automatically detects the graphics card.
   A **New Hardware Found** message box appears, informing you that a display adapter has been detected.

2. When a dialog box similar to Figure 6 appears, click the **Next** button.

3. Click the **Other Locations** button when it appears in the **Update Device Driver Wizard** dialog box.

4. Insert the Graphics Blaster RIVA TNT2 Value CD into your CD-ROM drive.

5. In the **Select Other Location** dialog box, type **D:\WINDOWS** (where D: represents your CD-ROM drive) and click the **OK** button.

6. In the **Update Device Driver Wizard** dialog box, click the **Finish** button.

7. In the **Insert Disk** message box, click the **OK** button.

*Figure 6: The **Update Device Driver Wizard** dialog box.*

8. In the **Copying Files** dialog box, type **D:\WINDOWS** and click the **OK** button.
   The drivers are copied to your system.

9. In the **Update Device Driver Wizard** dialog box, click the **OK** button.

10. When prompted to restart your system, click the **Yes** button.

11. After the system has restarted, proceed to install the applications. Click **Start** -> **Run**.

12. In the **Run** dialog box, type **D:\WINDOWS\SETUP** and click the **OK** button.

13. Follow the instructions on the screen to complete the setup.
    If you do not install all the applications now, you can install them later.

To install in Windows 98

1. Switch on your system.
   Windows 98 automatically detects the graphics card.
   An **Add New Hardware Wizard** message box appears, informing you that a display adapter has been detected.

2. When a dialog box similar to Figure 7 appears, select the option **Display a list of all the drivers in a specific location, so you can select the driver you want**.

3. Click the **Next** button.

4. Insert the Graphics Blaster RIVA TNT2 Value CD into your CD-ROM drive.

5. In the **Models** list box, click the **Have Disk** button.

*Figure 7: Selecting the option **Display a list of all the drivers in a specific location, so you can select the driver you want**.*

6. In the **Install From Disk** dialog box, type **D:\WINDOWS** (where D: represents your CD-ROM drive) and click the **OK** button.

   If you are installing Graphics Blaster RIVA TNT2 Value as a second or subsequent card to make use of Windows 98's multi-monitor capability, you will see an **Update Driver Warning** message telling you that the driver you have selected may not work correctly. You *must* click the **Yes** button to confirm that you want to use the selected driver. Otherwise, the system will install the wrong driver and will not recognize the card as a Graphics Blaster RIVA TNT2 Value card (for details, see "Windows 98 Multi-Monitor Display Problems" on page 20).

7. In the **Models** list box of the **Select Device** dialog box, make sure the **Graphics Blaster RIVA TNT2 Value** entry is selected and click the **OK** button.

8. Click the **Next** button.

9. Click the **Finish** button.

   The drivers are copied to your system.

10. When prompted to restart your system, click the **Yes** button.

11. After the system has restarted, proceed to install the applications. Click **Start** -> **Run**.

12. In the **Run** dialog box, type **D:\WINDOWS\SETUP** and click the **OK** button.

13. Follow the instructions on the screen to complete the setup.

    If you do not install all the applications now, you can install them later.

To install in Windows NT 4.0 (Service Pack 3)

1. Switch on your system.

2. Click **Start** -> **Run**.

3. In the **Run** dialog box, type **D:\WINNT40\SETUP** and click the **OK** button.

4. Follow the instructions on the screen to complete the setup.

   If you do not install all the applications now, you can install them later.

5. If the **Invalid Display Settings** message box appears after your system has restarted, click the **OK** button and change the display settings.

   For details, see "To change the display settings in Windows NT 4.0" on page 10.

Changing Settings

**To change the
display settings in
Windows NT 4.0**

1. Right-click your desktop, and then click **Properties** on the shortcut menu.
2. In the **Display Properties** dialog box, click the **Settings** tab.
3. In the **Desktop Area** group box, move the slider to set the desired resolution.
4. In the **Color Palette** group box, select the desired color. Certain colors may not be available for some display resolutions.
5. In the **Refresh Frequency** group box, select the desired refresh rate.
6. To test the settings, click the **Test** button, and then click the **OK** button.
   When the **Testing Mode** dialog box re-appears:
   • If the test bitmap is properly displayed, click the **Yes** button.
   • If not, click the **No** button. A warning message will be displayed. Click the **OK** button and repeat steps 3 through 6, changing one or more of the settings.
7. Click the **OK** button to close the **Display Properties** dialog box.

To change the performance settings in Windows 95/98 and Windows NT 4.0

You can customize the settings of your graphics card for optimal performance with applications. However, if your monitor display exhibits pixel drop (that is, pixels, usually white in color, appear on the screen) or any other abnormal behavior, revert to the factory default settings (see "Troubleshooting" on page 12.).

To do so in Windows 95 and Windows NT 4.0

1. Right-click your desktop, and then click **Properties** on the shortcut menu.
2. In the **Display Properties** dialog box, click the **BlasterControl** tab.
3. On the **BlasterControl** tabbed page, click the **Tweak** icon.
4. In the **Tweak** module, select the desired settings.
5. To specify additional settings for Graphics Blaster RIVA TNT2 Value, click the **Advanced Settings** button.
6. Select the desired settings and click the **OK** button.
   To see a brief description of an option or check box in the **BlasterControl Tweak** module, right-click the item, and then click **What's This**.

To do so in Windows 98

1. Right-click your desktop, and then click **Properties** on the menu that appears.
2. In the **Display Properties** dialog box, click the **Settings** tab.
3. On the **Settings** tabbed page, click the **Advanced** button.
4. In the **Advanced Properties** dialog box, click the **BlasterControl** tab.
5. Select the desired settings and click the **OK** button.
   To see a brief description of an option or check box in the **BlasterControl Advanced** module, right-click the item, and then click **What's This**.

About Sonnetech Colorific/3Deep

About Colorific

Colorific® color management software is the industry-standard process for monitor-to-monitor and monitor-to-printer color management. It gives you accurate, predictable color-matching between your screen and printer or over the Internet by calibrating the colors on your monitor. The software leads you through a series of simple choices about what you see on your screen. From this information, Colorific builds a precise description of how your monitor displays color, taking into account variable viewing conditions, monitor control settings, and video card adjustments.

Running Colorific

You should calibrate with Colorific before doing critical color work and whenever you change monitor color settings.

- If your monitor has a color temperature control, adjust it to 6500 K to get the best results.
- When printing to an inkjet printer, it is best to use special coated paper.

To run Colorific in Windows 95, Windows 98 and Windows NT 4.0

1. Click the **Colorific Control Panel** icon in the taskbar.
   The **Display Properties** dialog box appears.
2. Click the **Colorific** tab.
3. Click the **Recalibrate** button.
   The Colorific calibration utility is opened.
4. Follow the instructions on the screen to complete the process.

About 3Deep

3Deep™ is an exciting new tool (supporting Windows 95 and Windows 98) that allows gamers to experience 3D games as the game developers intended. Only 3Deep can provide accurate 3D lighting and shading for 3D games because it adjusts the user's monitor to match the game developer's monitor — not too dark and not washed out.

3Deep uses Colorific's technology (the industry standard for monitor calibration) to measure the unique characteristics of each gamer's display. No more dark games, and no more washed out games when you increase the contrast of your monitor. The results are awesome 3D lighting and shading effects. 3Deep is a consistent and high-quality solution for improving the 3D effect of your games!

Using 3Deep

To use 3Deep to calibrate your monitor's gamma value

1. Click **Start** -> **Settings** -> **Control Panel**.
2. In the **Control Panel** window, double-click the **3Deep** icon.
3. On the **3Deep Control Panel**, move the **Tweak** slider or click the **Calibrate Display** button.
4. Before playing a game, click **Default System Gamma**.

You can also display the **3Deep Control Panel** by doing the following:

1. Right-click your desktop, and then click **Properties** on the shortcut menu.
2. In the **Display Properties** dialog box, click the **3Deep** tab.

To uninstall Colorific in Windows 95/98 and Windows NT 4.0, and 3Deep in Windows 95/98

1. Right-click the **Colorific Control Panel** icon in the taskbar.
2. On the menu that appears, click **Exit**.
3. Click **Start** -> **Settings** -> **Control Panel**.
4. In the **Control Panel** window, double-click the **Add/Remove Programs** icon.
   The **Add/Remove Programs Properties** dialog box appears with the **Install/Uninstall** tabbed page displayed.
5. Select the entry **Colorific For Windows** from the list, and then click the **Add/Remove** button.
6. After **Colorific For Windows** is removed, select the entry **3Deep** from the list, and then click the **Add/Remove** button.

Getting More Information

For Graphics Blaster RIVA TNT2 Value

The Help file for Graphics Blaster RIVA TNT2 Value gives a brief introduction to the features supported by this graphics card.

To open the Help file for Graphics Blaster RIVA TNT2 Value

▶ Click **Start** -> **Programs** -> **Creative** -> **Graphics Blaster RIVA TNT2 Value** -> **Graphics Blaster RIVA TNT2 Value Help**.

For Creative BlasterControl

The Help file for Creative BlasterControl shows you how to use the BlasterControl utility to customize your screen resolution, color depth, and refresh rate in Windows.

To open the Help file for BlasterControl

▶ Click **Start** -> **Programs** -> **Creative** -> **BlasterControl Help**.

For Help topics specific to a BlasterControl module

▶ In the BlasterControl module you want, click the **Help** button.

For Creative SoftMPEG

The Help file for Creative SoftMPEG teaches you how to use SoftMPEG to play Video CDs and MPEG files.

To open the Help file for SoftMPEG

▶ In Creative SoftMPEG, right-click the Video window, and then click **Help** on the menu that appears.

For Colorific and 3Deep

The Help file for Colorific contains the User's Manual.

To open the Help file for Colorific

1. Click **Start** -> **Programs** -> **Colorific**.
   The Colorific calibration utility is opened.
2. On the right-hand corner of the menu bar, click **Help**.
3. On the **Help** menu, click **Help Contents**.

To open the Help file for 3Deep

1. Click **Start** -> **Settings** -> **Control Panel**.
2. In the **Control Panel** window, double-click the **3Deep** icon.
3. On the **3Deep Control Panel**, click the **Help** button.

Technical Support for Colorific and 3Deep

Updated information about using Colorific and 3Deep can be obtained from Sonnetech's Web site at www.sonnetech.com/tech_support. If you cannot find the information you need from the Web site or in the program's Help screens, send an e-mail message to info@sonnetech.com.

Technical Specifications

Architecture Highlights	❑ 64-bit wide graphics engine and frame buffer
	❑ 16 MB SDRAM
	❑ 250 million pixels/sec, bilinear filtered

3D Features

❑ Optimized for Microsoft's Direct3D API

❑ Complete DirectX 6.x support

❑ 100% hardware triangle setup

❑ Twin texel (TNT) 32-bit graphics pipeline
- 2 texture-mapped, lit pixels per clock
- Single pass multi-texturing support (DirectX 6.x and OpenGL ICD)
- Square and non-square texture support

❑ TextureBlend support examples:
- Multi-texture
- Bump map
- Texture modulation
- Light maps
- Reflection maps
- Detail textures
- Environmental maps
- Procedural textures
- Sub-pixel accurate

- ❑ Backend blend
  - • 32-bit ARGB rendering with destination alpha
  - • Point sampled, bilinear, trilinear and 8-tap
  - • Anisotropic filtering
- ❑ Per pixel perspective correct texture mapping
  - • Fog
  - • Light
  - • Mipmapping
- ❑ 24-bit or 16-bit hardware Z-buffer (fixed or floating)
- ❑ 8-bit stencil buffer
- ❑ Full scene anti-aliasing

2D Features

- ❑ High performance 128-bit 2D/GUI/DirectDraw acceleration
  - • Accelerated primitives include BLT, indexed DIB color translation, transparent BLT, stretch BLT, points, lines, polylines, polygons, fills, patterns, arbitrary rectangular clipping and fast text rendering hardware font cache
  - • Pipeline optimized for multiple color depths including 32, 24, 16, 15, and 8 bits per pixel
- ❑ Fast 32-bit VGA/SVGA support
- ❑ Multi-buffering (Double, Triple, Quad buffering) for smooth animation and video playback

Video Support

- ❑ Video acceleration for DirectShow, MPEG-1, MPEG-2 and Indeo
- ❑ X and Y smooth up and down scaling with filtering
- ❑ Per-pixel color keying
- ❑ Multiple video windows with hardware color space conversion and filtering (YUV 4:2:2 and 4:2:0)
- ❑ Video port supports ITU-CCIR 565

Specifications	❑ AGP 2X data transfer
	❑ VESA DDC 2B + DPMS
	❑ Single slot 2D, 3D graphics, and video accelerator
	❑ NVIDIA RIVA TNT2 Model 64 graphics engine
	❑ Integrated 300 MHz RAMDAC supporting up to 1920x1200 true color
	❑ MPEG-1, MPEG-2, and full-motion video acceleration/assistance
	❑ Full Plug and Play compliant
Drivers	❑ Windows NT 4.0 and Windows 2000 (when available) display drivers
	❑ Windows 95 and Windows 98 display driver, DirectDraw, Direct3D, DirectVideo, ActiveX
	❑ OpenGL ICD for Windows 95 and Windows NT 4.0
	❑ VBE 3.0 compliant
Utilities	❑ Creative Enhanced BlasterControl
	❑ Creative Enhanced SoftMPEG
	❑ Sonnetech Colorific/3Deep
Applications Supported	❑ All Windows 95 applications, including DirectDraw and Direct3D games and applications
	❑ OpenGL applications under Windows 95 and Windows 98

Table 2:   Refresh rates supported by different video modes

The refresh rates shown in the table are the highest obtainable and are monitor-dependent. Resolutions, pixel depths, and refresh rates are also driver-dependent and may not be available for some applications or operating systems.

Refresh Rates	Number of Colors		
Resolution	**256 (8-bit)**	**64k (16-bit)**	**16.7 million (32-bit)**
640x480	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200, 240	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200, 240	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200, 240
800x600	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200, 240	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200, 240	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200, 240
1024x768	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170
1152x864	60, 70, 72, 75, 85, 100, 120, 140, 144, 150	60, 70, 72, 75, 85, 100, 120, 140, 144, 150	60, 70, 72, 75, 85, 100, 120, 140
1280x1024	60, 70, 72, 75, 85, 100, 120	60, 70, 72, 75, 85, 100, 120	60, 70, 72, 75, 85, 100
1600x1200	60, 70, 72, 75, 85	60, 70, 72, 75, 85	60, 70, 72, 75
1920x1080	60, 70, 72, 75, 85	60, 70, 72, 75, 85	60, 70, 72
1920x1200	60, 70, 72, 75	60, 70, 72, 75	—

Troubleshooting

System Hangs, Blank Screen or Corrupted Display

After installing Graphics Blaster RIVA TNT2 Value and starting your system, the monitor displays a blank screen.

Solutions   Try the following:

❏ Switch off your system and wait a while before switching it on again.

❏ Verify that any built-in VGA on your motherboard is disabled and that you have removed any other video display card from your system.

❏ Ensure that your Graphics Blaster RIVA TNT2 Value card's bus connector is fully inserted into the expansion slot. Ensure this by pressing it gently and evenly into the slot.

❏ Verify that the pins of your monitor's VGA Input connector are not bent and that the connector is properly connected to the VGA Out connector of Graphics Blaster RIVA TNT2 Value.

Windows 98 Multi-Monitor Display Problems

The monitor connected to the second or successive Graphics Blaster RIVA TNT2 Value card remains blank even though the card and its drivers have been installed.

Cause   If Graphics Blaster RIVA TNT2 Value's drivers are not specified during the software installation (see "To install in Windows 98" on page 8), the system installs the second or successive Graphics Blaster RIVA TNT2 Value card as a VGA card which does *not* support Windows 98's multi-monitor feature.

Solution   Update the device drivers to Graphics Blaster RIVA TNT2 Value's drivers:

1. Right-click your desktop, and then click **Properties** on the shortcut menu.
2. In the **Display Properties** dialog box, click the **Settings** tab.
3. On the **Settings** tabbed page, click the **Advanced Properties** button.
4. In the **Advanced Display Properties** dialog box, click the **Change** button.
5. In the **Select Device** dialog box, click the **Have Disk** button.

6. Insert the Graphics Blaster RIVA TNT2 Value CD into your CD-ROM drive.

7. Follow steps 6 through 13 of the procedure in "To install in Windows 98" on page 8 to complete the update.

Other Display Problems

Monitor display flickers or the screen goes blank after Windows starts.

Cause   Your monitor may not support the resolution or refresh rate that you have set.

Solution   Use display settings supported by the monitor.
To change the display settings:

For the resolutions supported by your monitor, refer to its manual.

1. Restart your system in Windows 98 **Safe mode**. To do so:

   i. Restart your system and when the message "Starting Windows 98..." appears, press <F8>.
   A list of options such as **Safe Mode** and **Command Prompt Only Mode** appears.

   ii. Select **Safe Mode** and press <Enter>.

2. After your system has restarted, right-click the desktop and click **Properties**.

3. In the **Display Properties** dialog box, click the **Settings** tab.

4. Try the following:

   ❑ Make sure that the correct monitor is selected.
   To verify, click the **Change Display Type** button or the **Advanced Properties** button on the **Settings** tabbed page.

   ❑ Use a lower refresh rate or the adapter's default.
   For details on this, refer to the topic "Using BlasterControl Monitor Settings" in the BlasterControl Help file.

   ❑ Lower your monitor's resolution.
   To do so, adjust the color depth and desktop area on the **Settings** tabbed page.

Monitor display exhibits pixel drop (that is, pixels, usually white in color, appear on the screen) or other abnormal behavior.

Cause   The settings that you have selected for your graphics card may be incompatible with one or more games or applications that you are running.

Solution   Use the factory default settings:

1. Right-click your desktop, and then click **Properties** on the shortcut menu.
2. In the **Display Properties** dialog box, click the **BlasterControl** tab.
3. On the **BlasterControl** tabbed page, click the **Tweak** icon.
4. Click the **Restore Defaults** button.

Beeping Sounds During System Startup

When the system is starting up, there is a series of prolonged beeps.

Cause   Your Graphics Blaster RIVA TNT2 Value card may not be firmly inserted into the expansion slot.

Solution   Ensure that the bus connector of the graphics card is fully inserted into the expansion slot. Ensure this by pressing the card gently and evenly into the slot. You can also try removing the card and re-inserting it.

Problems Installing Software

In Windows 95 or Windows 98, the installation program for BlasterControl does not run automatically after you have inserted the installation CD into your drive.

Cause   The AutoPlay feature in your Windows 95 or Windows 98 system is not enabled.

Solution   To install the software from the CD:

1. Double-click the **My Computer** icon on your Windows desktop.
2. In the **My Computer** window, double-click the **Creative Graphics Blaster RIVA TNT2 Value** icon.
   If the installation program does not run, double-click the **Windows** folder icon followed by the **Setup** icon.
3. Follow the instructions on the screen to complete the installation.

Problems Using Software

When you restart Windows, one of the following error messages appears:

❑ "BlasterControl will only work on Creative graphics product drivers.
Do you want BlasterControl to be loaded the next time you start Windows?"

❑ "BlasterControl will only work on Creative graphics product drivers."

Cause   Graphics Blaster RIVA TNT2 Value drivers, required by BlasterControl, may have been replaced by other drivers when you installed DirectX applications.

Solution   Re-install or revert to the Graphics Blaster RIVA TNT2 Value drivers.
To revert to the drivers:

1. Right-click your desktop, and then click **Properties** on the shortcut menu.

2. In the **Display Properties** dialog box, click the **Settings** tab, and then click the **Change Display Type** button or the **Advanced Properties** button.

3. In the **Adapter Type** group box or on the **Adapter** tabbed page, click the **Change** button.

4. In the **Select Device** dialog box, click **Graphics Blaster RIVA TNT2 Value**, and then click the **OK** button.

5. In the **Insert Disk** message box, click the **OK** button without inserting any CD.

6. If Graphics Blaster RIVA TNT2 Value drivers and later versions of DirectX drivers are already installed, click the **Skip File** button until the **Adapter Type** group box or the **Adapter** tabbed page appears.

7. Click the two **Close** buttons to close the **Display Properties** dialog box.

8. When prompted to restart your system, click the **Yes** button.
After you have restarted your system, the newer DirectX drivers will work with the latest Graphics Blaster RIVA TNT2 Value drivers.

Problem with OpenGL
Applications

When starting OpenGL Screen Saver or applications in Windows 98, the message "No local buffer memory available" appears.

Solution Set a lower resolution and color depth:

1. Right-click your desktop, and then click **Properties** on the shortcut menu.
2. In the **Display Properties** dialog box, click the **Settings** tab.
3. In the **Desktop Area** group box, move the slider to set a lower resolution.
4. In the **Color Palette** group box, set to **640x480** and **16-bit color (high color)** for OpenGL applications to work properly.

OpenGL applications run uncharacteristically slowly in Windows 98.

Cause OpenGL applications do not support Windows 98's multi-monitor feature. Consequently, Windows 98 disables all hardware acceleration when the multi-monitor option is enabled.

Solution Disable the multi-monitor option:

1. Right-click your desktop, and then click **Properties** on the shortcut menu.
2. In the **Display Properties** dialog box, click the **Settings** tab.
3. Clear the **Extend my Windows desktop onto this monitor** check box.

Problem with PCI Bridge
(in Windows 95)

After installing Graphics Blaster RIVA TNT2 Value onto a Pentium II LX system or any other AGP system, the Resources tabbed page of the RIVA TNT2 Value Properties dialog box in Windows 95 shows resource conflicts similar to the following:
Memory Range used FEDC0000 - FEDDFFFF used by PCI standard PCI-to-PCI bridge.
Memory Range used FD800000 - FDFFFFFF used by PCI standard PCI-to-PCI bridge.
Memory Range used FE000000 - FE7FFFFF used by PCI standard PCI-to-PCI bridge.

Cause The "PCI standard PCI-to-PCI bridge" is the CPU chipset to AGP controller, which Windows 95 cannot identify properly.

Solution   No action required.

A conflict between the AGP video controller and the "PCI standard PCI-to-PCI bridge" in the Windows 95 Device Manager does not affect the functionality of the AGP card within Windows 95. This problem is common to all AGP graphics cards and does not affect Graphics Blaster RIVA TNT2 Value's functionality. It has been resolved in Windows 98.

Problem with AGP Aperture Size

Changing settings in CMOS incorrectly can cause the system to stop functioning.

Some of the steps from step 3 onwards may not apply to your system's CMOS. Refer to your system's CMOS documentation for more details.

DirectDraw/Direct3D fails to use hardware acceleration (HAL).

Cause   The CMOS setting for the AGP Aperture size is less than 8 MB.

Solution   Set the AGP Aperture size to 8 MB or more.
Do the following in CMOS:

1. Restart your system.

2. During the memory check, press <Delete>.
The CMOS setup menu appears.

3. Select **Chipset Features Setup** and press <Enter>.

4. Set your **AGP Aperture Size (MB)** to **8 MB** or more.

5. Press <Esc> to return to the CMOS setup menu.

6. Select **Save & Exit Setup**, and then press <Enter>.

7. Press <Y> and then press <Enter>.

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